



UNITED STATES PATENT AND TRADEMARK OFFICE

Bn
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/651,072	08/28/2003	Alan Frank Parker	ROCKCO P61AUS	7263
20210	7590	08/04/2006	EXAMINER	
DAVIS & BUJOLD, P.L.L.C.			NEGRON, ISMAEL	
112 PLEASANT STREET			ART UNIT	PAPER NUMBER
CONCORD, NH 03301			2875	

DATE MAILED: 08/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/651,072

Applicant(s)

PARKER, ALAN FRANK

Examiner

Ismael Negron

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 38 is/are allowed.
- 6) ☒ Claim(s) 29-36 and 39 is/are rejected.
- 7) ☒ Claim(s) 37 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on June 8, 2006 has been entered. No claim has been amended. Claims 11-19 and 21-28 have been cancelled. Claims 29-39 have been added. Claims 29-39 are still pending in this application, with claims 29, 38 and 39 being independent.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 29, 32-34, 36 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by KAYE (U.S. Pat. 4,929,021).

3. KAYE discloses an illumination device having:

- **a body member (as recited in claims 29 and 39), Figure 4,**
reference number 13;
- **at least two light sources (as recited in claims 29 and 39),**
column 4, lines 2 and 3;

- **the light source being aligned along a longitudinal axis of the body member (as recited in claims 29 and 39), column 4, lines 2-4;**
- **the light source lying within the body member (as recited in claims 29 and 39), as seen in Figure 4;**
- **the body member including at least one transparent region (as recited in claims 29 and 39), column 2, lines 34-36;**
- **light from the light source passing through the transparent region (as recited in claims 29 and 39), as seen in Figure 4;**
- **a plurality of transparent optical particles (as recited in claims 29 and 39), Figure 4, reference number 24;**
- **the optical particles lying in the body member (as recited in claims 29 and 39), as seen in Figure 4;**
- **the optical particles being closely packed but non-adhering (as recited in claims 29 and 39), as seen in Figure 4;**
- **the particles extending contiguously between each source of light and a side of the at least one transparent region which is directed towards an inside of the body member (as recited in claims 29 and 39), as seen in Figure 4;**
- **the optical particles having uniform size and shape (as recited in Claim 32), as seen in Figure 4;**
- **the optical particles varying in size over a spectrum of sizes (as recited in Claim 33), column 3, lines 51-56;**

- **the optical particles having a similar shape (as recited in 34),**
as seen in Figure 4;
- **the space inside the body member not occupied by the at least**
one light source or the optical particles is filled with at least
one of air, gas or vapor (as recited in claims 36 and 39),
inherent, as the space inside the body member is necessarily
contains air;
- **the at least one of air, gas or vapor being maintained at a**
controlled pressure relative to atmospheric pressure (as
recited in claims 36 and 39), inherent, as the disclose necessarily
structure maintains a pressure inside the tube member;

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 30, 31 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over KAYE (U.S. Pat. 4,929,021).

5. KAYE discloses an illumination device having:

- **a body member (as recited in Claim 29), Figure 4, reference number 13;**
- **at least two light sources (as recited in Claim 29), column 4, lines 2 and 3;**
- **the light source being aligned along a longitudinal axis of the body member (as recited in Claim 29), column 4, lines 2-4;**
- **the light source lying within the body member (as recited in Claim 29), as seen in Figure 4;**
- **the body member including at least one transparent region (as recited in Claim 29), column 2, lines 34-36;**
- **light from the light source passing through the transparent region (as recited in Claim 29), as seen in Figure 4;**
- **a plurality of transparent optical particles (as recited in Claim 29), Figure 4, reference number 24;**
- **the optical particles lying in the body member (as recited in Claim 29), as seen in Figure 4;**
- **the optical particles being closely packed but non-adhering (as recited in Claim 29), as seen in Figure 4;**
- **the particles extending contiguously between each source of light and a side of the at least one transparent region which is directed towards an inside of the body member (as recited in Claim 29), as seen in Figure 4;**

- **the particles being glass balls (as recited in Claim 30), column 3, line 52;**
- **the body member being a tube (as recited in Claim 31), column 2, lines 34 and 35;**
- **the tube forming the sole transparent region of the body member (as recited in Claim 31), as evidenced by Figure 4.**

6. KAYE discloses all the limitations of the claims, except:

- the light source being a light emitting diode (as recited in Claim 30);
- the body member being a tube of glass (as recited in Claim 31);
and
- at least one of the plurality of light sources being of a different color than the rest of the light sources (as recited in Claim 35).

7. The examiner takes Official Notice that the use of LEDs is old and well known in the illumination art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute an LED for the light source in the system of KAYE (as recited in Claim 30). One would have been motivated since LEDs are recognized in the illumination art to have many desirable advantages, including reduced size, high efficiency, low power consumption, long life, resistance to vibrations, and low heat production, over other light sources.

8. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to use glass as the material of the tube (as recited in

Claim 31), since it has been held by the courts that selection of a prior art material on the basis of its suitability for its intended purpose is within the level of ordinary skill. *In re Leshing*, 125 USPQ 416 (CCPA 1960) and *Sinclair & Carroll Co. v. Interchemical Corp.*, 65 USPQ 297 (1945). One would have been motivated as necessitated by the specific requirements of a specific application. In addition, it is noted that the instant specification is not only silent as to any advantage of using specifically glass as the material for the body member, but specifically states that transparent plastics (such as the one disclosed by KAYE) are equally suited materials for the body member as the claimed glass. See paragraph 25, lines 5 and 6 of the specification as filed.

9. Regarding at least one of the plurality of light sources having an output color different from that of at least one other of the light sources (as recited in Claim 35), it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to include light of different colors in the illumination device of KAYE as necessitated to suit the requirements of a desired illumination scheme, as per the teachings of KAY (see column 1, lines 47-51).

Allowable Subject Matter

10. Claim 38 is allowed.

11. Claim 37 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter:

Applicant discloses an illumination device having a body member having at least one transparent region, at least one light source located inside the body member and disposed along a longitudinal axis of such member. Optical particles are located inside the body member and surrounding the at least one light source. The body member is a sealed enclosure with electrical conductors extending through a wall of such enclosure by means of a gas tight seal, for providing power to the light source.

13. No prior art was found disclosing individually, or suggesting in combination, the body member being a sealed enclosure with electrical conductors extending through a gas tight seal on a wall of the enclosure, for providing power to the light source, in combination with the claimed illumination device.

Response to Arguments

14. Applicant's arguments filed June 8, 2006 have been fully considered but they are not persuasive.

15. Regarding the Examiner's rejection of claims 11 and 21 (subject matter now presented in new claims 29 and 39) under 35 U.S.C. 102(b) as being anticipated by KAYE (U.S. Pat. 4,929,021), the applicant argues that the cited reference fails to disclose all the features of the claimed invention, specifically an illumination device. The applicant further argues that an illumination device is one for providing illumination of an

object to enable features of the particular object to be comprehended by an observer, and that the patented apparatus of KAYE does not falls into that category. The applicant even further argues that the intent and disclosure of KAYE is not in accord with those of the instant invention.

16. Regarding the Examiner's rejection of claims 13 and 23 (subject matter now presented in new Claim 30) under 35 U.S.C. 103(a) as unpatentable over KAYE (U.S. Pat. 4,929,021), the applicant argues that the cited reference fails to disclose all the features of the claimed invention, specifically the light sources been solid state light emitting devices. The Applicant further argues that KAYE fails to suggest the use of solid-state light emitting devices.

17. Regarding the Examiner's rejection of claims 18 and 21 (subject matter now presented in new claims 36 and 39) under 35 U.S.C. 102(b) as being anticipated by KAYE (U.S. Pat. 4,929,021), the applicant argues that the cited reference fails to disclose all the features of the claimed invention, specifically the device including a pressurized gas or vapor. The applicant further argues that KAYE inherently teaches the air inside the body member as been air at ambient temperature.

18. Regarding the subject matter of newly presented claims 31-36, the applicant present no arguments, except stating that such claims depend directly or indirectly from independent Claim 29 and would be allowable when/if the independent claim is allowed.

19. In response to applicant's arguments that KAYE fails to disclose an illumination device the applicant is respectfully advised that while the claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation to be applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably allow. *In re American Academy of Science Tech Center*, 70 USPQ2d 1827 (Fed. Cir. May 13, 2004). In this case, as detailed in previous section 3, KAYE discloses a device including a light source 26 for emitting light. While the patented apparatus of KAYE might, in arguendo, not be designed to function primarily as an area illuminator, it is a fact that it is an illumination device as it is capable of "*casting visible radiant energy in at least one direction to render objects in that direction visible*", as an illumination apparatus is defined in the art, or even "*providing illumination of an object to enable features of the particular object to be comprehended by an observer*" as per applicant's own definition.

However, even if the patented apparatus of KAYE was considered to be something other than an illumination device, it is noted that the claimed apparatus is only construed as an "illumination device" in the preamble of the claims. A preamble is generally not accorded any patentable weight where it merely recites the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). In this case, the body of the claims positively defines the claimed structure; the "illumination device" recitation merely stating the intended use of the claimed device, as admitted by the applicant in page 4 (lines 8-22).

20. In response to applicant's arguments that KAYE fails to disclose using solid-state light emitting devices as the light source, the applicant is strongly advised that the test for obviousness is not whether the claimed invention is expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, as detailed in previous section 7, the use and advantages of solid-state light emitting devices (i.e. light emitting diodes) is old and well known in the art.

21. In response to applicant's argument that there is no suggestion modify the KAYE to solid state light emitting devices as the light source, the applicant is further advised that suggestion or motivation to modify a prior art structure can be found in a reference, or reasoned from common knowledge in the art, scientific principles, art recognized equivalents, or legal precedent. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as previously state, the use and advantages of solid state light emitting devices (i.e. light emitting diodes) is old and well known in the art.

22. In response to applicant's arguments that KAYE failed to disclose a pressurized gas or vapor, the applicant is respectfully advised that while the claims of issued patents are interpreted in light of the specification, prosecution history, prior art and other claims, this is not the mode of claim interpretation to be applied during examination. During examination, the claims must be interpreted as broadly as their terms reasonably

allow. *In re American Academy of Science Tech Center*, 70 USPQ2d 1827 (Fed. Cir. May 13, 2004). In this case, it is noted that, while the applicant refers to a “pressurized” gas or vapor, the language of the claims merely recite a gas or vapor maintained at a controlled pressure relative to ambient atmospheric pressure. Since the claimed limitation states a broadly defined level of pressure control, but not a specific value of pressure, the conditions of the air contained inside the body member of KAYE were considered to broadly meet the claimed limitations.

Regarding the air inside the body member as been air at ambient temperature, such arguments are considered irrelevant, as the claims are silent as to a specific value for the temperature of the air inside the claimed body member.

Conclusion

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

24. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

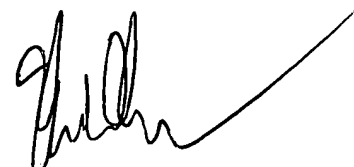
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negrón whose telephone number is (571) 272-2376. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea, can be reached at (571) 272-2378. The facsimile machine number for the Art Group is (571) 273-8300.

26. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) toll-free at 866-217-9197.


Ismael Negrón
Examiner
AU 2875


THOMAS M. SEMBER
PRIMARY EXAMINER